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CLAIMS

What Is Claimed Is:

1   1.   A method for remotely configuring networked devices, and the
2   networked devices coupled by a network to a server, and the server containing
3   program code segments each suitable for enabling the operation of a corresponding
4   group of the networked devices, and the method for remotely configuring comprising
5   the acts of:
6   receiving at the server a first data packet from an unidentified one of the
7   networked devices and the first data packet containing a device type identifier and a
8   random identifier, and the device type identifier corresponding to the group of the
9   unidentified one of the networked devices and the random identifier generated by the
10   unidentified one of the networked devices;
11   sending from the server a second data packet, and the second data packet
12   containing the random identifier, a program code segment, and a unique network
13   address, and the program code segment corresponding to the group of the
14   unidentified one of the networked devices and the unique network address assigned
15   by the server to the unidentified one of the networked devices, responsive to the
16   receiving act;
17   processing at the unidentified one of the networked devices, the second data
18   packet on the basis of the random identifier contained therein; and
19   assigning as a network address, at the unidentified one of the networked
20   devices the unique network address assigned by the server during said act of sending.

1   2.   The method of Claim 1, wherein the receiving act further comprises
2   the acts prior to the receiving act of:
3   transmitting from the server an initial data packet to the networked devices;
4   accepting at each of the networked devices the initial data packet; and

5   sending the first data packet from an unidentified one of the networked

6   devices and the first data packet containing a device type identifier and a random

7   identifier, and the device type identifier corresponding to the group of the

8   unidentified one of the networked devices and the random identifier generated by the

9   unidentified one of the networked devices, responsive to the accepting act.

1   3.   The method of Claim 2, wherein the initial data packet transmitted

2   from the server in said transmitting act further comprises transitory code to enable

3   the unidentified one of the networked devices to generate the random identifier.

1   4.   The method of Claim 2, wherein the initial data packet transmitted

2   from the server in said transmitting act further comprises transitory code to enable

3   the unidentified one of the networked devices to detect the second data packet in said

4   accepting act.

1   5.   The method of Claim 2, wherein the initial data packet transmitted

2   from the server in said transmitting act further comprises transitory code to enable

3   the unidentified one of the networked devices to assign the unique network address in

4   said assigning act.

1   6.   A method for configuring each among a plurality of networked

2   devices coupled to a network as a node among a plurality of nodes and the

3   networked device including a cache memory, a main memory and a device type

4   identifier corresponding to a group of the plurality of networked devices, and the

5   method for configuring comprising the acts performed on the networked device of:

6   receiving an initial data packet including transitory program code from a node

7   among the plurality of nodes on the network;

8   executing the transitory program code to perform the acts of;

9   a) placing the device type identifier and a random identifier in a first

10   data packet on the network with a destination address corresponding to a source

11   address contained in the initial data packet;

12   b) accepting a second data packet from the node on the basis of the

13   random identifier contained therein, and the second data packet containing a unique

14   network address and a program code segment suitable for enabling the operation of

15   the networked device; and

16   c) assigning as a network address for the networked device the unique

17   network address in said second data packet;

18   processing the program code segment to enable the networked device.

1   7.   The method of Claim 6, wherein the receiving act further comprises

2   the act of :

3   storing the transitory program code in the cache memory.

1   8.   The method of Claim 7, wherein the accepting act further comprises

2   the act of:

3   storing the program code segment in the cache memory.

1   9.   The method of Claim 8, wherein the accepting act further comprises

2   the act of:

3   transferring the program code segment from the cache memory to the main

4   memory.

1   10.   The method of Claim 6, further comprising the act subsequent to the

2   assigning act of:

3   d) transferring the program code segment to main memory and

4   e) enabling cache memory.

1   11.   An integrated circuit comprising:

2   a processing unit;

3   a port for external communication;

4   memory means; and

5   a switching means for switching the circuit between a working mode

6   and an initiating mode, wherein the circuit in the initiating mode, is adapted to

7   bring the processing unit to execute external instructions received from an

8   external initiating signal.

1   12.   The integrated circuit of Claim 11, wherein the circuit is pre-

2   programmed to, in the initiating mode, receive said external signal and to bring the

3   processing unit to execute the external instructions contained therein.

1   13.   The integrated circuit of Claim 11, wherein said memory means

2   comprises a first memory unit for storing internal instructions to receive said signal

3   and to execute the external instructions.

1   14.   The integrated circuit of Claim 12, wherein said memory means

2   comprises a first memory unit for storing internal instructions to receive said signal

3   and to execute the external instructions.

1   15.   The integrated circuit, of Claim 13, wherein the first memory unit

2   comprises a memory having stored thereon said internal instructions.

1   16.   The integrated circuit of Claim 15, wherein said memory means

2   comprises a second memory unit for storing the external instructions to be executed

3   by the processing unit.

1   17.   The integrated circuit of Claim 16, wherein the second memory unit

2   comprises a cache memory unit.

1   18.   The integrated circuit of Claim 17, wherein the cache memory unit

2   comprises a random access memory.

1   19.   The integrated circuit of Claim 11 wherein the port in the initiating

2   mode, is adapted to recognize and receive said external initiating signal.

1   20.   A method for bringing an integrated circuit to execute instructions,

2   comprising the acts performed on the integrated circuit of:

3   bringing the integrated circuit into an initiating mode, wherein it is

4   adapted for receiving an external initiating signal including external instructions;

5   receiving said external signal; and

6   processing said external instructions.

1   21.   The method of Claim 20, wherein the act of bringing the integrated

2   circuit into an initiating mode further comprises the act of :

3   adapting the integrated circuit to receive an external signal via a port for

4   external communication.

1   22.   The method of Claim 21, wherein the adapting act further comprises

2   the act of:

3   enabling the integrated circuit to recognize said external signal among other

4   signals.

1   23.   The method of Claim 22, wherein the integrated circuit, in said

2   adapting act, is given a predetermined initiating address to be utilized to receive the

3   external signals.

4   24.   The method of Claim 20, comprising the act of sending the external

5   signal to the integrated circuit.

1   25.   A method of Claim 24, wherein the external signal is addressed to the

2   integrated circuit having a predetermined initiating address.

1   26.   The method of Claim 20, wherein the external instructions, when

2   received and prior to being executed, are stored in a memory means forming part of

3   the integrated circuit.

1   27.   The method of Claim 26, wherein the memory means is a cache

2   memory unit and wherein the act of bringing the integrated circuit in an initiating

3   mode comprises the act of adapting the cache memory unit to work as a random

4   access memory for storing the external instructions.